

Collembola from Oregon. II ¹

HAROLD GEORGE SCOTT ²

The 12 species of springtail insects (except *Bourletiella repandus* q. viz.) recorded in this paper were collected by Gerald F. Kraft ³ in connection with an Oregon State University-U. S. Public Health Service grant study of the ecology of Berry Creek, Oregon (Benton Co., 9 miles north of Corvallis). All species are new records for Oregon. Most specimens will be deposited in the Oregon State University collection, but examples will be deposited with the Academy of Natural Sciences, Philadelphia, Pennsylvania.

Hypogastrura armata (Nicolet, 1841).

OREGON RECORDS. Berry Creek, Jan., Apr., Jun., Dec. 1959, 1960; G. F. Kraft.

DISTRIBUTION. Alaska, Ariz., Cal., Colo., Conn., Fla., Ill., Iowa, La., Maine, Mass., Minn., Mo., N. H., N. J., N. Y., N. C., Ohio, Ore., Penna., Tex., Utah, Wash.; Ontario, Northwest Territories and Manitoba (Canada); Greenland, Mexico, South America, Europe, Africa, Australasia, Asia.

Hypogastrura californica (Bacon, 1914).

OREGON RECORDS. Berry Creek, Jan., Nov., Dec. 1960; G. F. Kraft.

DISTRIBUTION. Cal., N. M., Ore.

Hypogastrura guthriei (Folsom, 1916).

OREGON RECORD. Berry Creek, Oct. 1960, G. F. Kraft.

DISTRIBUTION. Cal., Minn., N. M., Ore., Utah; Ontario (Canada).

¹ Part I: ENT. NEWS, 73(8): 237-241.

² Training Branch, Communicable Disease Center, Public Health Service, U. S. Department of Health, Education, and Welfare, Atlanta 22, Georgia.

³ Department of Biology, Western Washington State College, Bellingham, Washington.

Genus **SPINIFACIES** nov.

TYPE SPECIES. *Spinifacies oregonensis* gen. et sp. nov.

DESCRIPTION. Family Poduridae. Subfamily Hypogastrurinae. Body elongate, segmented; scales and pseudocelli absent; Ant III sense organ with rods, no cones; postantennal organ with 3 tubercles; eyes 8 and 8 on dark eyepatches; mandible with molar surface; face with 4 dorsal spines; prothorax well developed, setaceous; unguiculus present; furcula well developed, not reaching colophore; anal spines 2.

DISCUSSION. The following combination of characters distinguishes *Spinifacies* from all other known genera of Hypogastrurinae: (1) eyes 8 and 8; (2) postantennal organ with 3 overlapping tubercles; (3) furcula and unguiculus present; (4) anal spines 2; (5) facial spines 4. For a key to genera of Nearctic Hypogastrurinae into which this genus can be readily placed, see Scott, 1962.

Spinifacies oregonensis gen. et sp. nov. Figure 1.

TYPE LOCALITY. Holotype and 6 paratypes taken from Berry Creek, 9 miles north of Corvallis, Benton County, Oregon, by G. F. Kraft, Oct. 1960. Holotype and one paratype will be deposited with the Academy of Natural Sciences, Philadelphia, Pennsylvania; remaining paratypes in the Oregon State University collection.

DESCRIPTION. Body elongate, segmented; blue-black dorsally with light intersegmental bands, yellowish ventrally; scales and pseudocelli absent; prominent dorsal setae as indicated in Fig. 1, lesser setae arranged over entire tergum; few ventral setae; body segments not ankylosed; tergal, pleural and sternal plates clearly delimited; head prognathous; antenna shorter than head with segments approximately as 3:3:8:8; antennal segments not subsegmented or annulate; Ant III sense organ with 2 curved rods set in a depression; postantennal organ with 3 unequal overlapping tubercles and central boss; eyes 8 and 8 on dark eyepatches; mouthparts chewing; mandible with molar plate and 4 distal teeth; maxilla with 2 distal teeth; face with 4 large

dorsal spines; prothorax well developed, setaceous; knobbed tenent hairs absent; unguis with inner tooth; unguiculus un-toothed, exceedingly slender, about $2/5$ unguis; Abd III sub-

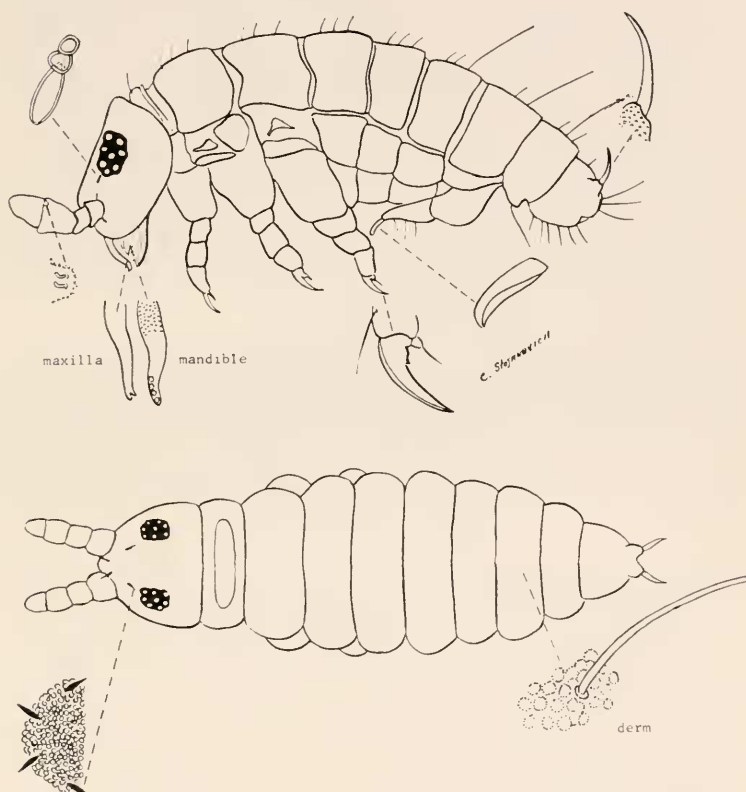


FIG. 1. *Spinifacies oregonensis* gen. et sp. nov.

equal to IV; furcula well developed, not reaching collophore; manubrium to dens to mucro approximately as 12:8:3; mucro slipper shaped, hollow; anal spines 2, longer than hind unguis, total length about 1.7 mm.

Xenylla humicola (Fabricius, 1780).

OREGON RECORDS. Berry Creek, Apr., May, Nov., Dec. 1960, G. F. Kraft.

DISTRIBUTION. Cal., Conn., Mass., N. M., N. Y., Ore., Wash.; Ontario and Manitoba (Canada), South America, Europe, Australasia.

Anurida maritima (Guerin-Meneville, 1836).

OREGON RECORD. Berry Creek, Oct. 1960; G. F. Kraft.

DISTRIBUTION. Fla., Mass., N. J., N. Y., N. C., Ore; Europe, Africa, Australasia.

NOTE. This maritime species is typically associated with ocean beaches or brackish water. It has, however, been reported associated with fresh water (Stach, 1949).

Peteronychella perpulchra Börner, 1909.

OREGON RECORD. Berry Creek, Jan. 1960; G. F. Kraft.

DISTRIBUTION. Ore.; Japan.

NOTE. This genus has not previously been recorded outside of Japan.

Isotomina thermophila (Linnaniemi, 1907).

OREGON RECORD. Berry Creek, Mar. 1960; G. F. Kraft.

DISTRIBUTION. Fla., Ill., Iowa, Ore., Tex., Utah; South America, Europe, Australasia.

Folsomia guthriei (Linnaniemi, 1912).

OREGON RECORD. Berry Creek, Oct. 1960; G. F. Kraft.

DISTRIBUTION. Minn., N. M., Ore.

Entomobrya brunneicapilla Maynard, 1951.

OREGON RECORDS. Berry Creek, Apr., May, Aug., Sep., Oct., Nov. 1960; G. F. Kraft.

DISTRIBUTION. N. M., N. Y., Ore.

Sminthurinus niger (Lubbock, 1867).

OREGON RECORD. Berry Creek, Dec. 1960; G. F. Kraft.

DISTRIBUTION. Ida., Iowa, Mass., Minn., N. Y., Ore., Tex., Northwest Territories (Canada); Greenland; South America, Europe, Africa, Australasia, Asia.

NOTE. The Oregon specimens are *S. concolor* (Meinert, 1896) now regarded as synonymous with *S. niger* (See Gisin, 1960).

Bourletiella (Deuterostminthurus) repanda (Agren, 1903).

OREGON RECORDS. Swept from alfalfa, Amity, Yamhill County, Oregon, 12 Jun. 1961, by J. Capizzi.

DISTRIBUTION. Ida., Iowa, Ore., Utah; Europe, Australasia.

SUMMARY

Twelve species of springtail insects (including *Spinifacies oregonensis* gen. et sp. nov.) are recorded for the first time from Oregon. *Pteronychella perpulchra* is recorded for the first time outside of Japan.

REFERENCES CITED

- AGREN, H. 1903. Stett. Ent. Ztg. 64: 113-176.
BACON, G. 1914. J. Ent. Zool. 6: 137-184.
BORNER, C. 1909. Sitz. Ges. Naturf. Freunde Berlin 2: 99-135.
FABRICIUS, O. 1780. Fauna groenlandica. Hafniae et Lipsiae, 211-214.
FOLSOM, J. W. 1916. Proc. U. S. Natl. Mus. 50: 477-525.
GISIN, H. 1960. Collembolenfauna Europa. Mus. Hist. Nat. Geneve, 312 pp.
GUERIN-MENEVILLE, F. 1836. IN: Iconographie de regne animal de G. Cuvier 3: 11.
LINNANIEMI, W. 1907. Allg. Teil. Acta Soc. Fennicae 34: 32-86.
———. 1912. Spezieller Teil. Helsingfors Acta Soc. Sci. Fennicae 40: 1-36.
MAYNARD, E. A. 1951. The Collembola of New York. Ithaca: Comstock Publ. Co., xxiv + 339 pp.
MEINERT, F. 1896. Medd. Naturh. Foren., 167-173.
NICOLET, H. 1841. Nouv. Mem. Soc. Helvetia Sci. Nat. 6: 1-88.
SCOTT, H. G. 1962. Ent. News 73():
STACH, J. 1949. Acta Mon. Mus. Hist. Nat., Polish Akad. Sci. Lett. (Krakow), ii + 48 pp.